creating a new file;

determining, based on pressure data received from the plurality of pressure sensors, a transition from a sitting phase to a walking phase;

adapting a sampling rate for the plurality of pressure sensors, the adapting including augmenting a first sample rate for the plurality of pressure sensors to a second sample rate for the plurality of pressure sensors for the walking phase;

augmenting a first update rate for the GPS integrated circuit to a second update rate for the GPS integrated circuit for the walking phase;

collecting sensor data including storing the pressure data and a location data recorded during the sitting phase and the walking phase in the flash memory storage; and

determining if a test has reached a limit on iterations.

11. The smart shoe of claim **10**, wherein the first sample rate and the second sample rate are within a range between 0.5 Hertz and 15 Hertz, the first sample rate being less than the second sample rate.

12. The smart shoe of claim **10**, further comprising a battery coupled to the microprocessor, the GPS integrated circuit, and the plurality of pressure sensors.

13. The smart shoe of claim **10**, further comprising a radio frequency transceiver for wireless communication between the smart shoe and other electronic networking components.

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